Dear **BAA 06-48** Proposer Information Requester:

The BAA 06-48 Proposer Information Pamphlet is enclosed in response to your request. This pamphlet is divided into three sections.

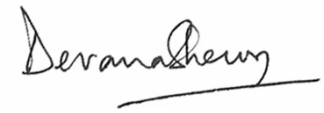
SECTION I: Proposer Information provides further information on Hemispherical Array Detectors for Imaging (HARDI), the submission, evaluation, and funding processes, proposal and proposal abstract formats, and other general information.

SECTION II: Broad Agency Announcement (BAA) 06-48 Hemispherical Array Detectors for Imaging (HARDI) is a reprint of the BAA which was posted on the Federal Business Opportunities (FedBizOpps) website at http://www.fedbizopps.gov/ and the Grants.gov website at http://www.grants.gov/.

SECTION III: Defense Advanced Research Projects Agency/ Microsystems Technology Office (DARPA/MTO) provides information on current programs within MTO.

Thank you for your interest in BAA 06-48 Hemispherical Array Detectors for Imaging (HARDI).

Sincerely,



Devanand Shenoy, Ph.D.

SECTION I: BAA 06-48 Proposer Information

This section provides further information on Hemispherical Array Detectors for Imaging (HARDI), the submission, evaluation, and funding processes, proposal and proposal abstract formats, and other general information.

The Defense Advanced Research Projects Agency (DARPA) often selects its research efforts through the Broad Agency Announcement (BAA) process. The BAA will appear first on the FedBizOpps website, http://www.fedbizopps.gov/ and Grants.gov website at http://www.grants.gov/. Interested proposers must obtain Section 2 (Reprint of BAA FedBizOpps Announcement) as it includes important information regarding this solicitation. Both documents together constitute the BAA. The following information is for those wishing to respond to the BAA.

DARPA is soliciting innovative research proposals to develop Hemispherical Array Detectors for Imaging (HARDI) in the VIS-NIR-SWIR (400-1900 nm) spectral region. The ultimate vision for the program is to demonstrate a focal plane array integrated on a hemispherical surface that will enable high-performance with a small form factor and field of view that far exceeds the state-of-the-art possible with planar focal arrays. The program's end objectives are to demonstrate a focal plane array prototype that achieves a $D^* > 10^{13}$ $cmHz^{½}/W$ over a wide spectral range, a 1 cm radius of curvature, and a large 120^{o} FOV at a 60 Hz frame rate. Proposed research should investigate innovative approaches that enable revolutionary advances in organic and/or inorganic material systems with inexpensive, easily scalable processing methods. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice.

BACKGROUND AND DESCRIPTION

Persistent surveillance from next-generation platforms such as UAVs is of critical importance to the military. State-of-the-art cameras on UAVs for example suffer from a limited field of view, have insufficient spectral range, inadequate and non-uniform illumination over the focal plane for a large field of view and require the use of multiple lenses and complex post processing to correct for spherical and other optical aberrations. The increased complexity of such cameras adds to the size, weight, and power consumption and thereby increases the payload on platforms with limited payload capability. A simple curved focal plane with a very wide field of view (the eye has a large field of view due to the shape of the retina) for continuous detection from 400-1900 nm will address all of these concerns. Multi-purpose, wide spectral range and wide FOV cameras have applications beyond persistent surveillance such as on precision-guided munitions.

The objective of the HARDI program is to exploit the optical, electrical, and mechanical properties of both organic and inorganic semiconductor materials along with innovative

processing methods to create compact, light-weight detection systems. The program goal is to develop new photo-detectors that will allow the use of fewer optical elements and eliminate the need for image post-processing by utilizing a far simpler optical front-end system that is required for a hemispherical focal plane array. The challenge to be addressed in this program is to achieve high photo-detector performance over a wide 400-1900 nm spectral band on a curved surface. The detectivity of such a curved focal plane array must be comparable to the performance of inorganic semiconductor planar arrays currently demonstrated in the NIR spectral region (using detectivity, D*, as the relevant metric) with FOV that far exceed those of current systems.

PROGRAM OBJECTIVES AND STRUCTURE

The program will be conducted in three phases with two technical areas of interest that include both organic and inorganic materials-based approaches. If the offerors wish to respond to both technical areas of interest, two separate proposals are required. Offerors should supply the following information:

- Details of the timeline and intermediate metrics required to meet the overall program objectives.
- For new materials development, a detailed list of material performance metrics required to meet end-of-program device metrics.
- A detailed description of the material manufacturing technologies that need to be developed, and how they will enable the program to meet the objectives.
- Go/No-Go metrics and milestones at self-defined time intervals to allow periodic program review of the technology development for Go/No-Go decision points.

1. Technical Area One: Organic Materials-Based Devices

Phase I will focus on the technical development of a photodiode that operates in the spectral range of 400-1400 nm. The research and development during this phase will require materials and process development of organic semiconductor materials that have performance parameters desirable to achieve the end goal of a $D^* > 10^{13}$ $cmHz^{½}/W$. These materials could be organic or organic/inorganic composites. The anticipated challenge for organic materials will be the optical properties required for a photodiode over this spectral range as well as issues related to processing the high-performance materials without compromising the optical and electrical properties. In order to attain the end goal of $D^* > 10^{13}$ $cmHz^{½}/W$, the organic materials will need to achieve specific materials parameters which will be milestones for the phase. These materials parameters could include (depending on the specific approach proposed): an absorption coefficient greater than 10^5 cm^{-1}; an external quantum efficiency of 80 %; and a charge separation/charge recombination rate of 100 that leads to an internal quantum efficiency of 99%. During this phase, the focus will be on the following processing metrics:

- Detector area: 200 µm
- Feature size: 50 µm

- Registration: 10 µm
- Radius of curvature: 3 cm

Phase II will extend the spectral range to 400-1900 nm with the focus on integration of materials into a 128 x 128 photodetector array. Anticipated thrusts will be two-fold: (1) Maintaining the materials parameters necessary to enable the end of program D* metric for a spectral range including the SWIR and (2) Novel processing technology necessary to create a small-scale curved array with more stringent features. During this phase, the focus will be on the following processing metrics:

- Detector area: 50 µm
- Feature size: 20 µm
- Registration: 1 µm
- Radius of curvature: 2.5 cm

Phase III will consist of prototype development resulting in a focal plane array with f/1.4 optics and 120^{o} FOV. During this phase, the focus will be on the following processing metrics for the integrated focal plane array from 400-1900 nm:

- D* (400-1900 nm) ($cmHz^{½}/W$): > 10^{13}
- Array size: million pixels
- Radius of curvature: 1 cm
- Fill factor: 80%
- Frame rate: 60 Hz
- Dynamic range: 60 dB
- Operability: 99%
- MTBF > 5000 h

2. Technical Area Two: Inorganic Materials-Based Devices

Phase I will focus on the technical development of a photodiode that operates in the spectral range of 400-1400 nm. The research and development during this phase will exploit the materials and process development of inorganic semiconductor materials that have performance parameters desirable to achieve the end goal of a D* > 10^{13} $cmHz^{½}/W$. These materials could be amorphous inorganics that can be deposited and patterned on a hemispherical surface or alternately, inorganic structures prepared on a planar substrate and transferred to a non-planar surface.

The anticipated challenge for inorganic semiconductor diodes will be the development of a novel processing method required to create a non-planar photodiode array. During this phase, the focus will be on the following processing metrics:

- Detector area: 200 µm
- Feature size: 50 µm

- Registration: 10 µm
- Radius of curvature: 3 cm

Phase II will extend the spectral range to 400-1900 nm with the focus on integration of materials into a 128 x 128 photodetector array. Anticipated thrusts will be the processing necessary to create a small-scale array with more stringent features and devising a clear technical road map to achieve the end-goal of an 80 % fill factor with a million-pixel array on a small 1 cm radius form factor. During this phase, the focus will be on the following processing metrics:

- Detector Area: 50 µm
- Feature size: 20 µm
- Registration: 1 µm
- Radius of curvature: 2.5 cm

Phase III will consist of prototype development resulting in a focal plane array with f/1.4 and 120^{o} FOV. During this phase, the focus will be on the following processing metrics to develop the integrated focal plane array from 400-1900 nm:

- D* (400-1900 nm) ($cmHz^{½}/W$): > 10^{13}
- Array size: million pixels
- Radius of curvature: 1 cm
- Fill factor: 80 %
- Frame rate: 60 Hz
- Dynamic range: 60 dB
- Operability: 99%
- MTBF > 5000 h

Technical Area I&II

Offerors are expected to describe their plan to evaluate and test the hemispherical focal plane array detectors that are developed during phases II and III. Details of the optical systems/sub systems for evaluating the wide field of view detector over a broad spectral range should be described and information on access to such test systems should be included. The BAA does not include Read Out Integrated Circuit (ROIC) development. However, offerors should include clear and specific details on how the detector will be tested and with what specific ROIC components. ROM costs for such sub systems and accessories should also be included.

TECHNOLOGY TRANSITION

DARPA is interested in the development of curved photodiode arrays that meet the objectives of a broad range of DoD systems and platforms. Evaluation of a technology transition plan is therefore desirable. A clear, specific, and coherent road map will be

necessary to transfer the technology to the appropriate military services and shall be included in the proposal.

SUBMISSION PROCESS

Proposers are required to submit full proposals by the time and date specified in the BAA in order to be considered during the initial round of selections; however, proposals received after this deadline may be received and evaluated up to one year from date of posting on FedBizOpps and FedGrants. Full proposals submitted after the due date stated in the BAA may be selected contingent on the availability of funds.

The typical proposal should express a consolidated effort in support of one or more related technical concepts or ideas. Disjoint efforts should not be included into a single proposal.

Restrictive notices notwithstanding, proposals may be handled, for administrative purposes only, by a support contractor. This support contractor is prohibited from competition in DARPA technical research and is bound by appropriate nondisclosure requirements. Proposals may not be submitted by fax or e-mail; any so sent will be disregarded.

Awards made under this BAA are subject to the provisions of the Federal Acquisition Regulation (FAR) Subpart 9.5, Organizational Conflict of Interest. All offerors and proposed subcontractors must affirmatively state whether they are providing scientific, engineering and technical assistance (SETA) or similar support to any DARPA technical office(s) through an active contract or subcontract. All affirmations must state which office(s) the offeror supports, and identify the prime contract number. Affirmations should be furnished at the time of proposal submission. All facts relevant to the existence or potential existence of organizational conflicts of interest, as that term is defined in the FAR 9.501, must be disclosed. The disclosure shall include a description of the action the offeror has taken, or proposes to take, to avoid, neutralize or mitigate such conflict.

Proposals selected for funding are required to comply with provisions of the Common Rule (32 CFR 219) on the protection of human subjects in research (http://www.dtic.mil/biosys/downloads/32cfr219.pdf) and the Department of Defense Directive 3216.2 (http://www.dtic.mil/whs/directives/corres/html2/d32162x.htm). All proposals that involve the use of human subjects are required to include documentation of their ability to follow Federal guidelines for the protection of human subjects. This includes, but is not limited to, protocol approval mechanisms, approved Institutional Review Boards, and Federal Wide Assurances. These requirements are based on expected human use issues sometime during the entire length of the proposed effort. For proposals involving "greater than minimal risk" to human subjects within the first year of the project, performers must provide evidence of protocol submission to a federally approved Institutional Review Board (IRB) *at the time of final proposal submission to DARPA.* For proposals that are forecasted to involve "greater than minimal risk" after the first year, a discussion on how and when the proposer will comply with submission to a federally approved IRB needs to be provided in the submission. More information on applicable federal regulations can be found at the

Department of Health and Human Services – Office of Human Research Protections website (http://www.dhhs.gov/ohrp/).

EVALUATION CRITERIA/EVALUATION AND FUNDING PROCESSES

Proposals will not be evaluated against each other since they are not submitted in accordance with a common work statement. DARPA's intent is to review proposals as soon as possible after they arrive; however, proposals may be reviewed periodically for administrative reasons.

For evaluation purposes, a proposal is the two-volume document described in PROPOSAL FORMAT (see below). Other supporting or background materials submitted with the proposal will be considered for the reviewer's convenience only and not considered part of the proposal.

Evaluation of proposals will be accomplished through a technical review of each proposal using the following criteria, which are listed in descending order of relative importance: (l) overall scientific and technical merit; (2) potential contribution and relevance to the DARPA mission; (3) plans and capability to accomplish technology transition (4) offerors capabilities and related experience; (5) realism of proposed schedule and (6) cost reasonableness and realism.

As soon as the proposal evaluation is completed, the proposer will be notified of selectability or non-selectability. Selectable proposals will be considered for funding, non-selectable proposals will be destroyed. (One copy of non-selectable proposals may be retained for file purposes.) Additionally, the Government reserves the right to select for award all, some, or none of the proposals received and to make awards without discussions. All responsible sources capable of satisfying the Government's needs may submit a proposal which shall be considered by DARPA. Awards will be made to offerors whose proposals are determined to be the most advantageous to the Government, all factors considered, including the potential contributions of the proposed work to the overall research program and the availability of funding for the effort. Awards may be made to any offeror whose proposal is determined selectable regardless of its overall rating.

Proposals identified for funding may result in a procurement contract, grant, cooperative agreement, or other transaction depending upon the nature of the work proposed, the required degree of interaction between parties, and other factors. If warranted, portions of resulting awards may be segregated into pre-priced options.

PROPOSAL FORMAT

All full proposals must be in the format given below. Nonconforming proposals may be rejected without review. Proposals shall consist of two volumes. All pages shall be printed on 8-1/2 by 11 inch paper with type not smaller than 12 point. The page limitation for full

proposals includes all figures, tables, and charts. Volume I, Technical and Management Proposal, may include an attached bibliography of relevant technical papers or research notes (published and unpublished) which document the technical ideas and approach upon which the proposal is based. Copies of not more than three (3) relevant papers can be included with the submission. The bibliography and attached papers are not included in the page counts given below. The submission of other supporting materials along with the proposal is strongly discouraged and will not be considered for review. Except for the attached bibliography, Volume I shall not exceed forty (42) pages. Maximum page lengths for each section are shown in braces { } below.

Volume I, Technical and Management Proposal

Section I. Administrative

A. {1} Cover sheet to include: (1) BAA number; (2) Technical area; (3) Lead Organization Submitting proposal; (4) Type of business, selected among the following categories: "LARGE BUSINESS", "SMALL DISADVANTAGED BUSINESS", "OTHER SMALL BUSINESS", "HBCU", "MI", "OTHER EDUCATIONAL", or "OTHER NONPROFIT"; (5) Contractor's reference number (if any); (6) Other team members (if applicable) and type of business for each; (7) Proposal title; (8) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available); (9) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available), total funds requested from DARPA, and the amount of cost-share (if any); (10) Date proposal was prepared; and (11) Proposal Expiration Date.

B. {1} Official transmittal letter.

Section II. Summary of Proposal

This section provides an overview of the proposed work as well as an introduction to the associated technical and management issues. Further elaboration will be provided in Section III.

A. {1} Innovative claims for the proposed research. This section is the centerpiece of the proposal and should succinctly describe the uniqueness and benefits of the proposed approach relative to the current state-of-art and alternate approaches.

B. {1} Deliverables associated with the proposed research and the plans and capability to accomplish technology transition and commercialization. Include in this section all proprietary claims to results, prototypes, intellectual property, or systems supporting and/or necessary for the use of the research, results, and/or prototype. If there are no proprietary claims, this should be stated.

C. {1 + 1 table} Cost, schedule and milestones for the proposed research, including estimates of cost for each task in each year of the effort delineated by the prime and major subcontractors, total cost and company cost share, if applicable. **Note: Measurable milestones should occur at the end of every phase which last from 12-18 months each.** These milestones should enable and support a go/no go decision for the next phase.

D. {2} Technical rationale, technical approach, and constructive plan for accomplishment of technical goals in support of innovative claims and deliverable production. (In the full proposal, this section should be supplemented by a more detailed plan in Section III.)

E. {1} General discussion of other research in this area.

F. {1 - graphic + description} A clearly defined organization chart for the program team which includes, as applicable: (1) the programmatic relationship of team members; (2) the unique capabilities of team members; (3) the task responsibilities of team members; (4) the teaming strategy among the team members; (5) the key personnel along with the amount of effort to be expended by each person during each year.

Section III. Detailed Proposal Information

This section provides the detailed discussion of the proposed work necessary to enable an in-depth review of the specific technical and managerial issues. Specific attention must be given to addressing both risk and payoff of the proposed work that make it desirable to DARPA.

A. {6} Statement of Work (SOW) written in plain English, outlining the scope of the effort and citing specific tasks to be performed and specific contractor requirements.

B. {2} Description of the results, products, transferable technology, and expected technology transfer path enhancing that of Section II.B.

C. {7} Detailed technical rationale enhancing that of Section II.

D. {6} Detailed technical approach enhancing and completing that of Section II.

E. {2} Comparison with other ongoing research indicating advantages and disadvantages of the proposed effort.

F. {2} Discussion of proposer's previous accomplishments and work in this or closely related research areas.

G. {1} Description of the facilities that would be used for the proposed effort.

H. {1} Detail support enhancing that of Section II, including formal teaming agreements which are required to execute this program.

I. {4+ 1 table} Cost schedule and milestones for the proposed research, including estimates of cost for each task in each year of the effort delineated by the prime and major subcontractors, total cost, and any company cost share. **Note: Measurable milestones should occur at the end of every phase which last from 12-18 months each.** These milestones should enable and support a go/no go decision for the next part of the effort. Where the effort consists of multiple tasks which could reasonably be partitioned for purposes of funding, these should be identified as options with separate cost estimates for each.

Section IV. Additional Information

A brief bibliography of relevant technical papers and research notes (published and unpublished) which document the technical ideas upon which the proposal is based. Copies of not more than three (3) relevant papers can be included in the submission.

Volume II, Cost Proposal – {No page limit}

A. Cover sheet to include: (1) BAA number; (2) Technical area; (3) Lead Organization Submitting proposal; (4) Type of business, selected among the following categories: "LARGE BUSINESS", "SMALL DISADVANTAGED BUSINESS", "OTHER SMALL BUSINESS", "HBCU", "MI", "OTHER EDUCATIONAL", or "OTHER NONPROFIT"; (5) Contractor's reference number (if any); (6) Other team members (if applicable) and type of business for each; (7) Proposal title; (8) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available); (9) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), and electronic mail (if available); (10) Award instrument requested: cost-plus-fixed-fee (CPFF), cost-contract--no fee, cost sharing contract--no fee, or other type of procurement contract (*specify)*, grant, cooperative agreement, or other transaction; (11) Place(s) and period(s) of performance; (12) Total proposed cost separated by basic award and option(s) (if any); (13) Name, address, and telephone number of the offeror's cognizant Defense Contract Management Agency (DCMA) administration office *(if known)*; (14) Name, address, and telephone number of the offeror's cognizant Defense Contract Audit Agency (DCAA) audit office *(if known)*; (15) Date proposal was prepared; (16) Date of Proposal Expiration.

B. Detailed cost breakdown to include: (1) total program cost broken down by major cost items (direct labor, subcontracts, materials, other direct costs, overhead charges, etc.) and further broken down by year; (2) major program tasks by year; (3) an itemization of major subcontracts and equipment purchases; (4) an itemization of any information technology (IT)* purchases; (5) a summary of projected funding requirements by month;

- IT is defined as "any equipment, or interconnected system(s) or subsystem(s) of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the agency. (a) For purposes of this definition, equipment

and (6) the source, nature, and amount of any industry cost-sharing. Where the effort consists of multiple tasks which could reasonably be partitioned for purposes of funding, these should be identified as options with separate cost estimates for each.

C. Supporting cost and pricing information in sufficient detail to substantiate the summary cost estimates in B. above. Include a description of the method used to estimate costs and supporting documentation. Note: "cost or pricing data" as defined in FAR Subpart 15.4 shall be required if the offeror is seeking a procurement contract award of $650,000 or greater unless the offeror requests an exception from the requirement to submit cost or pricing data. "Cost or pricing data" are not required if the offeror proposes an award instrument other than a procurement contract (e.g., a grant, cooperative agreement, or other transaction).

INTELLECTUAL PROPERTY

The government will assess items of intellectual property that are proposed to be delivered with less than Unlimited Rights as part of the "Overall scientific and technical merit" evaluation criterion.

1. Procurement Contract Proposers

a. Noncommercial Items (Technical Data and Computer Software)

Proposers responding to this BAA requesting a procurement contract to be issued under the FAR/DFARS, shall identify all noncommercial technical data, and noncommercial computer software that it plans to generate, develop, and/or deliver under any proposed award instrument in which the Government will acquire less than unlimited rights, and to assert specific restrictions on those deliverables. Proposers shall follow the format under DFARS 252.227-7017 for this stated purpose. In the event that proposers do not submit the list, the Government will assume that it automatically has "unlimited rights" to all noncommercial technical data and noncommercial computer software generated, developed, and/or delivered under any award instrument, unless it is substantiated that development of the noncommercial technical data and noncommercial computer software occurred with mixed funding. If mixed funding is anticipated in the development of

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is used by an agency if the equipment is used by the agency directly or is used by a contractor under a contract with the agency which – (1) Requires the use of such equipment; or (2) Requires the use, to a significant extent, or such equipment in the performance of a service or the furnishing of a product. (b) The term "information technology" includes computers, ancillary, software, firmware and similar procedures, services (including support services), and related resources. (c) The term "information technology" does not include – (1) Any equipment that is acquired by a contractor incidental to a contract; or (2) Any equipment that contains imbedded information technology that is used as an integral part of the product , but the principal function of which is not the acquisition, storage, manipulation, management , movement, control, display, switching, interchange, transmission, or reception of data or information. For example, HVAC (heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices , and medical equipment where information technology is integral to its operation, are not information technology."

noncommercial technical data, and noncommercial computer software generated, developed, and/or delivered under any award instrument, then proposers should identify the data and software in question, as subject to Government Purpose Rights (GPR). In accordance with DFARS 252.227-7013 Rights in Technical Data - Noncommercial Items, and DFARS 252.227-7014 Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation, the Government will automatically assume that any such GPR restriction is limited to a period of five (5) years in accordance with the applicable DFARS clauses, at which time the Government will acquire "unlimited rights" unless the parties agree otherwise. Proposers are admonished that the Government may use the list during the source selection evaluation process to evaluate the impact of any identified restrictions, and may request additional information from the proposer, as may be necessary, to evaluate the proposer's assertions. If no restrictions are intended, then the proposer should state "NONE."

A sample list for complying with this request is as follows:

NONCOMMERCIAL			
Technical Data Computer Software To be Furnished With Restrictions	Basis for Assertion	Asserted Rights Category	Name of Person Asserting Restrictions
(LIST)	(LIST)	(LIST)	(LIST)

b. Commercial Items (Technical Data and Computer Software)

Proposers responding to this BAA requesting a procurement contract to be issued under the FAR/DFARS, shall identify all commercial technical data, and commercial computer software that may be embedded in any noncommercial deliverables contemplated under the research effort, along with any applicable restrictions on the Government's use of such commercial technical data and/or commercial computer software. In the event that proposers do not submit the list, the Government will assume that there are no restrictions on the Government's use of such commercial items. The Government may use the list during the source selection evaluation process to evaluate the impact of any identified restrictions, and may request additional information from the proposer, as may be necessary, to evaluate the proposer's assertions. If no restrictions are intended, then the proposer should state "NONE."

A sample list for complying with this request is as follows:

COMMERCIAL			
Technical Data Computer Software To be Furnished With Restrictions	Basis for Assertion	Asserted Rights Category	Name of Person Asserting Restrictions
(LIST)	(LIST)	(LIST)	(LIST)

2. NonProcurement Contract Proposers - Noncommercial and Commercial Items (Technical Data and Computer Software)

   Proposers responding to this BAA requesting a Grant, Cooperative Agreement, Technology Investment Agreement, or Other Transaction for Prototype shall follow the applicable rules and regulations governing these various award instruments, but in all cases should appropriately identify any potential restrictions on the Governments use of any Intellectual Property contemplated under those award instruments in question. This includes both Noncommercial Items and Commercial Items. Although not required, proposers may use a format similar to that described in Paragraphs 1.a and 1.b above. The Government may use the list during the source selection evaluation process to evaluate the impact of any identified restrictions, and may request additional information from the proposer, as may be necessary, to evaluate the proposer's assertions. If no restrictions are intended, then the proposer should state "NONE."

3. All Proposers – Patents

   Please include documentation proving your ownership of or possession of appropriate licensing rights to all patented inventions (or inventions for which a patent application has been filed) that will be utilized under your proposal for the DARPA program. If a patent application has been filed for an invention that your proposal utilizes, but the application has not yet been made publicly available and contains proprietary information, you may provide only the patent number, inventor name(s), assignee names (if any), filing date, filing date of any related provisional application, and a summary of the patent title, together with either: 1) a representation that you own the invention, or 2) proof of possession of appropriate licensing rights in the invention.

4. All Proposers-Intellectual Property Representations

   Please provide a good faith representation that you either own or possess appropriate licensing rights to all other intellectual property that will be utilized under your proposal for the DARPA program.

   NOTE: The Government will take into consideration any IP proposed to be delivered with less than unlimited rights as part of evaluation criteria numbers 1 and 3.

GUIDANCE FOR CLASSIFIED INFORMATION AND DATA

The Government anticipates that proposals submitted under a BAA will be unclassified. In the event that a proposer chooses to submit a classified proposal or submit any documentation that may be classified, the following information is applicable.

Security Classification guidance on DD Form 254 will not be provided at this time since DARPA is soliciting ideas only. After reviewing the incoming proposals, if a determination is

made that the award instrument may result in access to classified information, a DD Form 254 will be issued and attached as part of the award. Proposers choosing to submit a classified proposal must first receive permission from the Original Classification Authority to use their information in applying to this BAA. An applicable classification guide should be submitted to ensure that the proposal is protected appropriately.

Classified submissions shall be in accordance with the following guidance:

Collateral Classified Data: Use classification and marking guidance provided by previously issued security classification guides, the Information Security Regulation (DoD 5200.1-R), and the National Industrial Security Program Operating Manual (DoD 5220.22-M) when marking and transmitting information previously classified by another original classification authority. Classified information at the Confidential and Secret level may only be mailed via U.S. Postal Service (USPS) Registered Mail or U.S. Postal Service Express Mail (USPS only; not DHL, UPS or FedEx). All classified information will be enclosed in opaque inner and outer covers and double wrapped. The inner envelope shall be sealed and plainly marked with the assigned classification and addresses of both sender and addressee. The inner envelope shall be addressed to:

Defense Advanced Research Projects Agency (DARPA)
ATTN: BAA06-44, DARPA/MTO, Dr. Devanand Shenoy
3701 North Fairfax Drive, Suite 535
Arlington, VA 22203-1714

The outer envelope shall be sealed with no identification as to the classification of its contents and addressed to:

Defense Advanced Research Projects Agency (DARPA)
Security & Intelligence Directorate, Attn: CDR
3701 North Fairfax Drive, Suite 832
Arlington, VA 22203-1714

All Top Secret materials should be hand carried via an authorized, two-person courier team to the DARPA Classified Document Registry (CDR).

Special Access Program (SAP) Information: Contact the DARPA Program Security Support Center (PSSC) at 703-812-1962/1970 for further guidance and instructions prior to transmitting to DARPA. All Top Secret SAP, must be transmitted via approved methods for such material. Consult the DoD Overprint to the National Industrial Security Program Operating Manual for further guidance. It is strongly recommended that you coordinate the transmission of SAP material and information with the DARPA PSSC prior to transmission.

Sensitive Compartmented Information (SCI) Data: Contact the DARPA Special Security Contact Office (SSCO) at 703-812-1993/1994 for the correct SCI courier address and instructions. All SCI should be transmitted through your servicing Special Security Officer (SSO) / Special Security Contact Officer (SSCO). All SCI data must be transmitted through your

servicing Special Security Officer (SSO) / Special Security Contact Officer (SSCO). All SCI data must be transmitted through SCI channels only (i.e., approved SCI Facility to SCI facility via secure fax).

Proprietary Data: All proposals containing proprietary data should have the cover page and each page containing proprietary data clearly marked as containing proprietary data. It is the proposer's responsibility to clearly define to the Government what is considered proprietary in nature.

Proposers must have existing and in-place prior to execution of an award, approved capabilities (personnel and facilities) to perform research and development at the classification level they propose.

AWARD ADMINISTRATION INFORMATION

(1) Central Contractor Registration. Selected proposers not already registered in the Central Contractor Registry (CCR) will be required to register in CCR prior to any award under this BAA. Information on CCR registration is available at http://www.ccr.gov.

(2) Representations and Certifications. In accordance with Federal Acquisition Regulation 4.1201, prospective proposers shall complete electronic annual representations and certifications at http://orca.bpn.gov. Representations and Certifications associated with the DFARS will be forwarded to offerors for completion during negotiations with the Government if so selected.

PUBLIC RELEASE OR DISSEMINATION OF INFORMATION

The following provision will be incorporated into any resultant contract:

(a) There shall be no dissemination or publication, except within and between the Contractor and any subcontractors, of information developed under this contract or contained in the reports to be furnished pursuant to this contract without prior written approval of the Contracting Officer Representative (COR). All technical reports will be given proper review by appropriate authority to determine which Distribution Statement is to be applied prior to the initial distribution of these reports by the Contractor. Papers resulting from unclassified contracted fundamental research are exempt from prepublication controls and this review requirement, pursuant to DoD Instruction 5230.27 dated October 6, 1987.

(b) When submitting material for clearance for open publication, the Contractor must furnish DARPA Technical Information Officer, 3701 North Fairfax Drive, Arlington VA 22203-1714, telephone (703) 526-4163 with five copies and allow four weeks for processing. Viewgraph presentations must be accompanied with a written text. Whenever a paper is to be presented at a meeting, the Contractor must indicate the exact dates of the meeting or the Contractor’s date deadline for submitting the material.

EXPORT LICENSES

The following provision will be incorporated into any resultant contract:

Should this project develop beyond fundamental research (basic and applied research ordinarily published and shared broadly within the scientific community) with military or dual-use applications the following apply:

(1) The contractor shall comply with all U. S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the Contractor shall be responsible for obtaining the appropriate licenses or other approvals, for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data, and software, or for the provision of technical assistance.

(2) The Contractor shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at any Government installation, where the foreign person will have access to export-controlled technical data or software.

(3) The Contractor shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.

(4) The Contractor shall be responsible for ensuring that the provisions of this clause apply to its subcontractors.

SUBCONTRACTING

Pursuant to Section 8(d) of the Small Business Act (15 U.S.C. 637(d)), it is the policy of the Government to enable small business and small disadvantaged business concerns to be considered fairly as subcontractors to contractors performing work or rendering services as prime contractors or subcontractors under Government contracts, and to assure that prime contractors and subcontractors carry out this policy. Each proposer who submits a contract proposal and includes subcontractors is required to submit a subcontracting plan IAW FAR 19.702(a) (1) and (2) should do so with their proposal. The plan format is outlined in FAR 19.704.

CONFIDENTIALITY

It is the policy of DARPA to treat all proposals as competitive information and to disclose their contents only for the purpose of evaluation. No proposals will be returned. The original of each proposal received will be retained at DARPA and all other copies of non-selected proposals destroyed. Documentation related to the source selection process will be marked SOURCE SELECTION INFORMATION – SEE FAR 2.101 AND 3.104.